

# Annual MSP Progress Report

**Covanta Haverhill, Inc.**  
**RR0128.008**

**2003**

In accordance with 310 CMR 7.08(2)(i) and the Material Separation Plan Guidance for Municipal Waste Combustors, please find attached the year 2003 annual progress report on the efforts and progress to date on educating the public to the hazards associated with mercury and programs designed to facilitate removal of mercury from the waste stream.

During 2003 Covanta Haverhill, Inc. (Covanta) continued the implementation of the second Material Separation Plan for Mercury Containing Products (MSP II). On June 30, 2002, the MSP I expired and was replaced by the MSP II. The MSP II, with minor variations, is a continuation of the goals and programs of the MSP I. As stated in the MSP II, various Hg collection and outreach activities continue to be conducted in the Covanta contract communities. In addition, other activities continue to be conducted with the hope of impacting and educating a broader population base. The following is an outline of the activities that were conducted between January 1, 2003 and December 31, 2003. Also included, where possible, is a quantification of the success of the activity. Where results of activities that were conducted are of a more subjective nature, we will attempt to indicate a level of success/participation.

### **A. Regional Outreach/Education: IWSA Component**

The Integrated Waste Services Association coordinated the regional education / outreach program for five Massachusetts' waste-to-energy facilities including facilities located in Saugus, North Andover, Millbury, Haverhill, and SEMASS.

#### **a) Objectives**

In 2003, the Regional Outreach Plan supported individual facility programs by the continued promotion of the media campaign, "Keep Mercury from Rising". This campaign included newspaper and radio advertisements. The campaign used targeted advertising educating the readers and listeners about the concerns related to mercury. The advertisements also encouraged residents to contact their local health departments to receive more information about mercury and find out where in their communities they could dispose of mercury containing devices.

The objectives for 2003 were met and included the following:

- The Regional Outreach Program continued to raise awareness about mercury-containing products in the home and the proper handling and disposal of these products;
- The Program provided information and promoted local recycling events;
- The Program continued to build an integrated communications program that leveraged opportunities for incremental, free media, while working synergistically with the efforts of individual waste-to-energy facilities.

#### **b) Tactics**

The Regional Outreach Component continued targeted advertising to reach communities serviced by the facilities, as well as implementing marketing of print advertisements and radio live-read script to run as public service announcements. A print advertisement targeted at contractors and urging the collection and recycling of thermostats containing

mercury switches was developed. The website, [www.keepmercuryfromrising.org](http://www.keepmercuryfromrising.org), was updated to include more contact information and contractor material, as well as continuing to provide information and assistance with recycling of mercury-containing products to the general public. A video was produced for each of the five waste-to-energy facilities that showed the unique and effective programs now in place to keep mercury containing products out of the waste stream.

### **c) Details of Regional Outreach Components**

#### **i. Advertising**

Radio and print advertising was run in May 2003. Facilities continued to use the “Keep Mercury From Rising” print advertisement featuring the thermometer. An advertisement featuring a thermostat was developed in 2003 and used in Boston Globe advertisements. A comprehensive list of newspapers and radio stations running the advertisements is submitted with this document. Radio is a targeted medium that provided cost-efficient mass communication and built frequency of message delivery. Print advertising was equally effective. In addition to advertising in the Boston Globe, individual facilities had the “Keep Mercury From Rising” advertisements available to announce local activities.

A three-week radio buy was implemented in May 2003. The buy was timed to encourage mercury recycling activities and added-value opportunities (e.g., sponsorship of special broadcasts, contests, and free spots that were stations provide).

In 2003, concentrated efforts were continued in the *Boston Globe* and in the radio stations in the Boston area that provided our message the most exposure to our audiences. The proportion of print to radio remained the same from 2002 to 2003, but was modified by stations, slightly, due to ranking changes. The communities targeted were: Lawrence, Haverhill, Chelmsford, Lynnfield, Reading, Stoneham, Wakefield, Danvers, Melrose, Groton, Littleton, Essex, Middleton, and Ayer – which are all covered by the North and Northwest Zones of the Boston Globe.

\*\*\*The Boston Globe was utilized for its reach with its circulation of 237,524; it allowed coverage of both weeks of the campaign in both mediums, and it enabled utilization of a maximum page size (page dominant) versus community-type newspapers. Overall, the Boston Globe generated high impact with its larger page size and color availability (color not available in most community papers), while reaching a large audience within our target communities more than one time.

#### **Boston Globe – Color Ads (5 column x 18 inches)**

##### **Zoned Editions – Sunday May 8 & 15, 2003      Circulation**

North Section (Danvers, Essex, Haverhill, Lynnfield, Melrose, Middleton, Wakefield)	113,579
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Northwest Section (Ayer, Chelmsford, Groton, Lawrence, Littleton, Reading, Stoneham)	<u>123,945</u>
Total	237,524

## **Radio**

<b>May 5, 2003 – May 19, 2003</b>	<b>GRPs</b>	
WBZ – AM – New Talk	57	
WODS – FM – Oldies	32	
WMJX – FM – AC	<u>55</u>	
Total		144

## **ii. Web-based Tools**

The website, [www.keepmercuryfromrising.org](http://www.keepmercuryfromrising.org), was updated to include more information regarding contractors' proper handling of mercury containing products and wastes, as well as additional links to websites of interest regarding proper handling of mercury containing products.

## **iii. Video**

The four-minute “Keep Mercury from Rising” educational video was completed for each facility. The video explains the need to recycle mercury-containing products and the efforts undertaken by the state of Massachusetts and waste-to energy facilities to reduce the amount of mercury entering the environment.

The video will be available for use at Covanta – Haverhill for educational purposes during tours and other meetings. Copies of the video will also be provided to local cable access television stations. Copies will also be given to local public officials and available to be shown at meetings, schools, senior citizen centers, and other organizations that would benefit from viewing the video.

## **d) Evaluation**

The effectiveness of the Keep Mercury From Rising educational efforts was measured in March, 2003 using a survey that included 400 completed interviews with Massachusetts residents. There was a 95% confidence level that the margin of error was within  $\pm 5\%$ . The survey included 35 closed-ended questions and five open-ended format questions. A growing number of residents (93% versus 88% in 2002 and 84% in 2001) knew for sure that a glass thermometer contained mercury. This may be due to the targeted ad campaign specifically using the glass thermometer image coupled with “Keep Mercury From Rising.” However, most respondents said they did not own mercury products

(similar to 2002 and 2001), while only 16% answered yes to owning mercury products – the lowest number in all three years of polling. A full report of the survey results were provided to the DEP in March 2003.

## **B. Mercury Products Collection Routes for Large Generators**

The primary objective of this program is to create and coordinate a collection route system between a mercury recycler and the large generators of mercury content bulbs (fluorescent, HID, Metal-Halide etc.). Covanta has continued working with the three communities of Haverhill, Chelmsford and Danvers that were targeted during the initial phase of implementation. A 50% reimbursement of the costs of recycling their mercury bearing products continued to be offered to the businesses as an incentive to join the program. While this program was designed for use by larger businesses, smaller businesses are allowed to participate if they feel the collection route program better satisfies their needs.

### **Activities Conducted:**

- During 2003, once again re-negotiated the agreement with ONYX Special Services, Inc. (formerly Superior Special Services, Inc.), of Stoughton, Massachusetts (a mercury recycler), allowing businesses utilizing our program to get more favorable pricing for the pick-up of their mercury containing material and the recycling of that material. Combining the Covanta 50% reimbursement grant with the favorable pricing from the ONYX agreement is a major component in the current and future success of this program.
- Breakfast meetings were planned in Danvers, Littleton and Chelmsford to help businesses understand the environmental concerns about mercury, the proper management of fluorescent bulbs and other mercury containing products, our program and how to participate in the collections. A mailing was sent to the entire business community of Littleton utilizing the list of businesses that was provided by ONYX as part of the planning process for the MSP I. Response was extremely low and the meetings were postponed until further outreach could be conducted. Unfortunately, funding cuts and subsequent layoffs at WasteCap (contracted to do the outreach) interfered with the 2003 timing and follow-up/outreach. Once replacement personnel were in place to continue with efforts on this portion of the MSP II, it was late in the year and WasteCap personnel/time could be utilized more effectively in helping to implement another program. Meetings will be scheduled and further outreach/education will be conducted during the fall and early summer in Danvers, Chelmsford, Littleton, Middleton, Groton and Wakefield.
- Attended and participated in the Haverhill Chamber of Commerce and the Greater Merrimack Valley Chamber of Commerce yearly business conferences. Exhibited at both events with a table-top display that focused on the environmental problems associated with the improper management of mercury, our program and the benefits of mercury recycling. Met with business leaders from throughout the Merrimack Valley and explained the environmental/health problems associated

with improper management of mercury and why as business leaders and parents they should be concerned and support mercury recycling efforts. Encouraged attendees to participate in our program.

- Conducted a joint, targeted mailing, with ONYX, to the Directors of all the Departments of Public Works in all of the Massachusetts cities and towns. The mailing was a promotional brochure on mercury recycling and contained additional information on the Covanta mercury products recycling program for the Directors in the Covanta contract municipalities.
- Participated in radio “talk” shows to explain the health problems associated with mercury in the environment and to promote our program and the responsible management of products containing mercury.
- Attended numerous Chambers of Commerce breakfast and luncheon meetings in a continuing effort to communicate the importance of our mercury products recycling program and to encourage participation in that program by the business community.
- Late in 2003 we began to prepare a mailing to all large (25+ full time employees) generators of mercury content bulbs in the Covanta contract municipalities. The mailing is scheduled for January 2004 and is designed to increase participation in the Covanta mercury products recycling program. The mailing will explain our program, the need/reason for it and how to receive further information (contact information, pricing etc.).
- As a member of the Solid Waste Association of North America’s Fluorescent Lamp Recycling Outreach Committee, helped in developing and reviewing draft materials that will ultimately become a “how to” guide designed to aid municipalities in setting-up fluorescent lamp recycling programs for the commercial sector. This guide should be available to our communities during 2004.

### **Progress to Date**

Covanta continues to believe in the value of this program. Businesses are generally receptive to making the changes we are advocating (at least verbally) when the need for that change is properly explained, and if we can provide ease of operation at a minimal cost.

Problems that were encountered in this program continue to be the inability to speak one-on-one with the appropriate contact at each business and adequately explain our program. Key personnel are often busy, off-site or otherwise unavailable when the contacts are attempted. We will continue to explore other means of contact to help us better gauge the level of effectiveness and increase participation in this portion of the program.

During this reporting period state budget cuts that severely impacted the grant funding earmarked for WasteCap and the consequent employee reductions/turnover at WasteCap continued to cause delays in WasteCap's ability to meet our original implementation schedule. We have rescheduled the items that were not completed during 2003 and expect the outreach/education portion of the MSP II that was contracted to WasteCap to be conducted and completed by WasteCap in 2004.

It continues to be difficult to measure, in a quantitative manner, how effective this portion of the program has been. We continue to work with ONYX on how they will/can collect and reflect the participation of businesses in this portion of the program and report that data back to us. ONYX does not break out, as a separate category, participation in this particular program. Also, if/when a business chooses to use a vendor other than ONYX to recycle their mercury/mercury bearing products - for any number of reasons (prior displeasure with ONYX, already utilizing a different vendor for hazardous waste etc.) - it is, at best, extremely difficult for us to track this activity.

Despite the challenges that this program presents, Covanta continues to feel that it offers both a valuable educational tool to the businesses and public, as well as a cost effective and relatively easy way to collect and recycle mercury bearing wastes. As we continue this program for another year, program results and data from ONYX combined with WasteCap's renewed involvement in outreach activities may yield data from 2004 that is more quantifiable than what has been available to date.

### **C. Mercury Product Collection Events for Residents and Small Businesses**

This program was originally designed to build on the existing municipal drop-off collection system in the four target communities of Lawrence, Haverhill, Chelmsford and Danvers. The MSP II continues that program and envisions that three (3) collections will be scheduled and conducted annually in each Covanta contract municipality that wishes to participate, has had education/outreach work performed in the business community and has signed a contract in place by June 30, 2004.

During 2003, three of the Covanta communities (Chelmsford, Haverhill and Danvers) had signed contracts and also had extensive education/outreach conducted in their respective business communities. A total of nine (9) collections were held within these communities. These events were designed to target and facilitate the collection of mercury and mercury bearing products from small businesses (less than 10,000 S.F.) and residents of the Covanta contract municipalities. While larger businesses are allowed to participate, a separate program that was discussed earlier in this report was available and designed to more appropriately meet and satisfy their needs for the collection of mercury bearing wastes.

#### **Activities Conducted**

- During 2003, once again re-negotiated and lowered the pricing for contracts between the Covanta contract municipalities and ONYX. These contracts are necessary for scheduling periodic collection events of mercury and mercury

bearing wastes (Hg Collection Days). It is necessary to negotiate a separate contract for each municipality that agrees to host collection events and allow Covanta to conduct the collections. Each contract is between ONYX and the municipalities (Haverhill, Danvers, Chelmsford, Wakefield, Groton, Littleton and Middleton, to date). While Covanta participates in the role of negotiating the contracts for the municipalities and guarantees payment of all costs incurred under the contracts, Covanta is not a party to the contracts.

- Breakfast meetings were planned in Danvers, Littleton and Chelmsford to help businesses understand the environmental concerns about mercury, the proper management of fluorescent bulbs and other mercury containing products, our program and how to participate in the collections. A mailing was sent to the entire business community of Littleton utilizing the list of businesses that was provided by ONYX as part of the planning process for the MSP I. Response was extremely low and the meetings were postponed until further outreach could be conducted. Unfortunately, funding cuts and subsequent layoffs at WasteCap (contracted to do the outreach) interfered with the 2003 timing and follow-up/outreach. Once replacement personnel were in place to continue with efforts on this portion of the MSP II, it was late in the year and WasteCap personnel/time could be utilized more effectively in helping to implement other programs. Meetings will be scheduled and further outreach/education will be conducted during the fall and early summer in Danvers, Chelmsford, Littleton, Middleton, Groton and Wakefield.
- During 2003, four additional communities signed contracts to allow collection events – Littleton, Groton, Wakefield and Middleton. Due to the staffing problems at WasteCap discussed earlier, extensive outreach/education in these communities was not conducted during 2003, but will instead be conducted early in 2004. Consequently, collections that would have been started in those communities during 2003 will now begin in the spring of 2004. Covanta continues to work with the remaining communities that have not yet signed contracts in hopes of having collections in all 14 Covanta contract communities.
- Continued to meet with numerous municipal officials (Town Managers, Boards of Health, Recycling coordinators, Mayors, DPW Directors, City Solicitors etc.) to promote the mercury product collection program and to facilitate the process of getting a signed contract with ONYX.
- Placed multiple newspaper display ads in The Lawrence Eagle Tribune, The Haverhill Gazette, Chelmsford Independent and The Danvers Herald that promoted the mercury product collection days and included contact numbers for further information.
- Held three (3) mercury and mercury product collection events for small businesses and residents of Haverhill, MA. fifty-two (52) individuals and/or



businesses participated in the three (3) collections that were conducted in Haverhill during 2003.

- Held three (3) mercury and mercury product collection events for small businesses and residents of Danvers, MA. six (6) individuals and/or businesses participated in the three (3) collections that were conducted in Danvers during 2003.
- Held three (3) mercury and mercury product collection event for small businesses and residents of Chelmsford, MA. four (4) individuals and/or businesses participated in the collection that was conducted in Chelmsford in 2002.
- Attended and participated in the Haverhill Chamber of Commerce and the Greater Merrimack Valley Chamber of Commerce yearly business conferences. Exhibited at both events with a table-top display that focused on the environmental problems associated with the improper management of mercury, our program and the benefits of mercury recycling. Met business leaders from throughout the Merrimack Valley and explained the environmental/health problems associated with improper management of mercury, why as business leaders and parents that they should be concerned and how to support mercury recycling efforts.
- Attended numerous Chambers of Commerce breakfast and luncheon meetings in a continuing effort to communicate our program to the business community.
- Participated in radio “talk” shows to explain the health problems associated with mercury in the environment and to promote our program and the responsible management of products containing mercury.
- As a member of the Solid Waste Association of North America’s Fluorescent Lamp Recycling Outreach Committee, helped in developing and reviewing draft materials that will ultimately become a “how to” guide designed to aid municipalities in setting-up fluorescent lamp recycling programs for the commercial sector. This guide should be available to our communities during 2004.

### **Progress to Date**

During 2003, nine (9) collections were conducted while implementing the MSP II. With the previously mentioned state budget cuts and consequent grant cutbacks as well as the employee reduction/turnover at WasteCap of Massachusetts (the vendor contracted to do outreach and educational activities for this part of the MSP II), it became necessary to delay the timeframe for implementation of this portion of the MSP II. While we presently have contracts in place with seven municipalities (Haverhill, Chelmsford, Danvers, Wakefield, Middleton, Littleton and Groton) there was insufficient time to do mailings and schedule/hold meetings explaining our program to the business community in the recently signed contract communities prior to scheduling collections. Additionally, more outreach/education activities need to be conducted in Chelmsford and Danvers in an

attempt to increase participation. All outreach/education activities contracted to WasteCap that had been delayed have been rescheduled for spring and early summer of 2004.

As previously stated, a tremendous amount of time continues to be expended in negotiating the contracts between ONYX and the municipalities. The number of people involved in each municipality, the changes necessary to the contract to satisfy each municipality's needs/requirements, the number of people who have to "sign-off" for each municipality, shuttling the contract back and forth between ONYX and the municipality with each change in language etc. – continues to be very involved and time consuming. The negotiations/review of the contracts between ONYX and the contract municipalities of Stoneham, Lynnfield, Reading, Essex and Melrose are under way and should all be finalized in 2004.

This is also a program that in many ways is difficult to accurately quantify. While we can track the number of participants and the amount of mercury and mercury bearing products that are brought to the collection event, we have no way of tracking the individuals that use alternative vendors or who are "participating" but because of the small volume of mercury bearing products (fluorescent bulbs etc.) that they have accumulated over such a short period of time, they have not found it necessary to transport and/or recycle them yet.

Certainly, we will have a clearer picture of participation rates and the amounts of mercury diverted from the waste stream with additional years of data, more collections to gather the data from and more communities from which to develop the data. While supporting data continues to be limited, we remain optimistic that once the businesses have been informed of the need to properly manage mercury-bearing wastes and shown how to do it, they will participate in the program. Much like residential recycling, once started, continued participation is rarely a problem. It has been demonstrated elsewhere that if you make it easy, relatively inexpensive and socially unacceptable to improperly manage mercury-bearing wastes, the business community will "do what is right".

#### **D. Thermometer Swaps/Exchanges**

Covanta requested and received permission to modify the Covanta MSP I to include thermometer swaps/exchanges and they continue to be included as part of the MSP II. Thermometer exchanges were conducted during calendar year 2003 at a number of different locations (Boards of Health, Flu Clinics, Departments of Public Works, Community Events/Festivals, HHW Collection Events, Transfer Stations, Medical Clinics, Community Outreach Organizations, PTA Meetings etc.) with a variety of results and participation.

##### **Activities Conducted**

- Covanta continued to sponsor multi-site, multi-day thermometer collection/exchanges in the Town of Danvers. A thermometer exchange was conducted at the Town sponsored (Board of Health) flu clinic at the Senior Center. Additionally, the Board of Health conducted a mercury fever thermometer

exchange in the Town Hall during 2003. Covanta supplied residents with a new digital thermometer when they exchanged their old mercury thermometer(s). Covanta paid all the advertising costs for the events and provided brochures and posters to help boost participation in the events. Covanta also paid for the recycling of all old mercury thermometers collected.

- Covanta continued to sponsor multi-day, multi-site, thermometer exchanges in the Town of Wakefield. Thermometer exchanges were held at the Board of Health Office and also at the Board of Health sponsored Flu Clinics. Covanta provided digital replacement thermometers to residents when they brought in their old, mercury fever thermometers. Advertising for the events was provided for and paid for by Covanta. Brochures and posters were provided and Covanta paid for the recycling of all collected mercury thermometers.
- Covanta continued to sponsor thermometer exchanges held in the City of Haverhill. The exchanges were held at the annual Household Hazardous Products Collection Events held at the Haverhill wastewater treatment facility and at the Board of Health office in City Hall. Covanta supplied digital replacement thermometers. Covanta provided posters and brochures. Advertising for the events was supplied and paid for by Covanta. Covanta paid for the recycling of all old mercury thermometers collected.
- Covanta continued to sponsor multi-day, multi-site, thermometer exchanges in the Town of Chelmsford. Thermometer exchanges were held at the Board of Health Office, the Recycling Coordinators Office and also at the Household Hazardous Products Collection Day. Additionally, thermometer exchanges were conducted at Parent – Teacher Association meetings at several schools in Chelmsford. Covanta provided digital replacement thermometers to residents when they brought in their old, mercury fever thermometers. Advertising for the events was provided for and paid for by Covanta. Brochures and posters were provided and Covanta paid for the recycling of all collected mercury thermometers.
- Covanta continued to sponsor multi-day, multi-site, thermometer exchanges in the Town of Groton. Thermometer exchanges were held at the Board of Health Office and the Groton Transfer Station. Covanta provided digital replacement thermometers to residents when they brought in their old, mercury fever thermometers. Advertising for the events was provided for and paid for by Covanta. Brochures and posters were provided and Covanta paid for the recycling of all collected mercury thermometers.
- Covanta continued to sponsor multi-day, multi-site, thermometer exchanges in the City of Lawrence. Thermometer exchanges were held at the Board of Health Office and through the Lawrence School Department. In addition, ongoing collections were held at community outreach and healthcare organizations (Casa de Salud and the Greater Lawrence Family Health Center) and at the Lawrence Universal Waste Shed (through the DPW). Covanta provided digital replacement

thermometers to residents when they brought in their old, mercury fever thermometers. Advertising for the events was provided for and paid for by Covanta. Brochures and posters were provided and Covanta paid for the recycling of all collected mercury thermometers.

- Covanta continued to sponsor a thermometer exchange in the City of Melrose at the Board of Health Office. Covanta provided digital replacement thermometers to residents when they brought in their old, mercury fever thermometers. Advertising for the events was provided for and paid for by Covanta. Brochures and posters were provided and Covanta paid for the recycling of all collected mercury thermometers.
- Covanta continued to sponsor a thermometer exchange in the Town of Stoneham at the Board of Health Office. Covanta provided digital replacement thermometers to residents when they brought in their old, mercury fever thermometers. Advertising for the events was provided for and paid for by Covanta. Brochures and posters were provided and Covanta paid for the recycling of all collected mercury thermometers.
- Covanta continued to sponsor thermometer exchanges in the Towns of Middleton and Lynnfield. Thermometer exchanges were held at the Town Transfer Stations and at the DPW offices. Covanta provided digital replacement thermometers to residents when they brought in their old, mercury fever thermometers. Advertising for the events was provided for and paid for by Covanta. Brochures and posters were provided and Covanta paid for the recycling of all collected mercury thermometers.
- Covanta sponsored multi-day, multi-site thermometer exchanges in the Town of Seabrook, N.H. at the Board of Health Office in the Town Hall and the Department of Public Works Office. Covanta provided digital replacement thermometers to residents when they brought in their old, mercury fever thermometers. Advertising for the events was provided for and paid for by Covanta. Brochures and posters were provided and Covanta paid for the recycling of all collected mercury thermometers.
- Covanta sponsored a thermometer exchange in the Town of Salem, N.H. at the Board of Health Office in the Town Hall. Covanta provided digital replacement thermometers to residents when they brought in their old, mercury fever thermometers. Advertising for the events was provided for and paid for by Covanta. Brochures and posters were provided and Covanta paid for the recycling of all collected mercury thermometers.
- Covanta sponsored a thermometer exchange in the Town of Littleton at the Department of Public Works Office. Covanta provided digital replacement thermometers to residents when they brought in their old, mercury fever thermometers. Advertising for the events was provided for and paid for by

Covanta. Brochures and posters were provided and Covanta paid for the recycling of all collected mercury thermometers.

- Covanta sponsored a thermometer exchange in the Town of Ayer at the Board of Health Office in Town Hall. Covanta provided digital replacement thermometers to residents when they brought in their old, mercury fever thermometers. Advertising for the events was provided for and paid for by Covanta. Brochures and posters were provided
- Covanta sponsored a thermometer exchange in the Town of Reading at the Board of Health Office. Covanta provided digital replacement thermometers to residents when they brought in their old, mercury fever thermometers. Advertising for the events was provided for and paid for by Covanta. Brochures and posters were provided and Covanta paid for the recycling of all collected mercury thermometers.
- In response to a request from the Massachusetts Executive Office of Environmental Affairs, picked-up two (2) cases of mercury fever thermometers from a non-profit, low-income healthcare agency in Lunenburg, MA.
- Multiple display ads for these events were placed in The Lawrence Eagle-Tribune, Haverhill Gazette, Rumbo, Danvers Herald, Salem News, Salem Observer, The Chelmsford Independent, The Reading Advocate, Stoneham Sun, Stoneham Independent, Wakefield Observer, The Wakefield Daily Item, The Daily Times Chronicle, The Groton Herald, The Public Spirit, The Tri-Town Transcript and The Village Reporter.
- Covanta continued to sponsor an ongoing thermometer exchange in the Town of Newburyport at the Board of Health/Recycling Office in Town Hall. Covanta provided digital replacement thermometers to residents when they brought in their old, mercury fever thermometers. Brochures and posters were provided
- Covanta also continues to conduct a mercury fever thermometer exchange at its own facility for the employees of Covanta Haverhill.
- We will continue these efforts in all the Covanta contract municipalities during 2004 and expect the Town of Essex to also participate

**Progress to Date**

The thermometer exchanges continue to be a tremendous success. Collections were held in fifteen (15) Covanta contract municipalities and they resulted in the removal and recycling of approximately 1908 mercury fever thermometers from homeowners. Clearly, there are still many mercury fever thermometers present in the households of the Covanta contract municipalities. Covanta expects to continue this program and hopes that the success reflected in these communities will be repeated in all Covanta contract communities during 2004.

**E. Municipal Reimbursement for Mercury Program Expenses**

In order to assist communities with the costs associated with mercury product recycling, Covanta continued to reimburse any Covanta contract community for the costs incurred in collection, storage and recycling of residentially and/or municipally generated mercury containing products (fluorescent lights, thermostats, thermometers etc.), collected at one-day HHP events or at permanent facilities (either permanent HHP centers or Universal Waste Sheds).

Further, Covanta continued to reimburse any contract community for all the cost associated with the purchase of a Universal Waste Shed (including signs, spill kit, etc.) if they did not have a Shed but wished to acquire one. During 2003 one (1) Shed was provided (Middleton) while 2 more municipalities have begun preliminary discussions on acquiring a Shed during 2004. That would bring the total number of Covanta contract municipalities that have Universal Waste Sheds available to their residents from the current number of eight (8) to ten (10).

**F. Thermostat Collection Program**

Early on, it was recognized that a significant portion of mercury contained in the municipal waste stream was entering through the improper management/disposal of mercury containing thermostats. While programs do exist for the recycling and reclamation of these products, participation by HVAC technicians, trades people and consumers are limited, at best. A program like the Thermostat Recycling Corporation's (TRC) has limited availability - it is only available at the wholesale level (not readily available to do-it-yourselfers) and the program is not advertised/marketed extensively in the communities where it is available. Poor recruitment efforts by the Thermostat Recycling Corporation, the initial cost of registering for the program and a lack of education/outreach to the HVAC trades people are among the reasons consistently mentioned for the low participation and limited collection numbers.

Covanta had proposed, over a two-year period, to purchase and distribute an initial supply of thermostat collection containers from the Thermostat Recycling Corporation (TRC). Covanta proposal included the purchase of an inventory sufficient to supply all the wholesale distributors of thermostats within the Covanta contract municipalities that wished to participate in the TRC program. Covanta also proposed to hold informational meetings for the HVAC industry, utilizing, where possible, their trade associations.

Additionally, as an added incentive to encourage the HVAC trades people to return end-of-life thermostats for recycling, Covanta proposed utilizing a cash “incentive” or a cash “discount” certificate redeemable by the drop-off wholesaler that receives the returned mercury thermostat. To date, no wholesaler has agreed to participate in the program.

When it became apparent that WasteCap would be unable to provide the outreach/educational efforts on the lamp recycling program early enough to have an impact on the collections being held in 2003, we began to focus attention on the thermostat recycling incentive program. The difficulty in recruiting wholesalers to participate indicated that, if we were going to be successful, we would have to pursue other opportunities to capture the thermostats for recycling. A mailing list was developed for all sixteen (16) Covanta contract municipalities, utilizing Standard Industrial Codes (SIC’s) to help target specific businesses that are traditionally involved in thermostat and mercury switch installation/removal. There are three (3) separate mailings: 1) mentioned earlier, to large (25+ employees) – targeting fluorescent light recycling; 2) targeting retailers – hardware stores, outlets, etc. – where mercury thermostats and switches are sold. There is no financial incentive offered to retail establishments who agree to participate; 3) targeting HVAC Technicians, trades people, plumbers, electricians, etc. Those who agree to participate in the program are offered an incentive of \$5.00 for each thermostat that they recycle through the program. It was decided to wait until after the December holidays before beginning to solicit participation in the program. The mailing was sent out in mid January 2004.

### **Activities Conducted**

- Covanta continues to review/research existing programs for information on motivating HVAC technicians to recycle the mercury thermostats and switches that they remove.
- Numerous discussions were held with HVAC wholesalers to get their input on the design of the program and to take advantage of their experience in working with the HVAC technicians. To date, we have been unsuccessful in recruiting any HVAC wholesalers to participate in our mercury thermostat recycling incentive program. We were also unsuccessful in persuading any non-members of the TRC program to participate in that program.
- Had several meetings and phone conferences with WasteCap staff to discuss and develop the program and design the materials for the mailings.

### **Progress to Date**

The thermostat recycling portion of the MSP II was scheduled to begin in early 2003. The budget cuts and staff reductions/replacements at WasteCap, as previously mentioned, have also impacted the timeline and implementation of this portion of the MSP II. While the rescheduling of the outreach and educational portions of the MSP II have caused a delay in the efforts put forth by WasteCap in this area, implementation is continuing and can be reviewed for effectiveness at the end of the MSP II. Adjustments or changes that need to be made to improve program performance etc., can be addressed in the MSP III.

## **G. Medical and Dental Outreach**

Covanta, with the assistance of WasteCap of Massachusetts (WasteCap), began the process of working with the medical and dental facilities within our contract communities during 2001. Our goal was to educate them on the problems associated with improper management of end of life mercury containing products/material and to work with them on implementing strategies designed to remove and/or replace these products, where possible. Where it was not practical to replace the mercury containing product (fluorescent light bulbs, for instance), Covanta and WasteCap promoted the establishment of programs that recycle these products.

### **Activities Conducted**

- Followed-up with the previously contacted hospitals located within Covanta contract communities. Offered to meet with hospital staff to discuss how we might best help them deal with the problem of mercury in a healthcare facility. Discussions were held with two hospitals on designing a program to help them remove and recycle mercury and mercury bearing products from their facilities.
- Facilitated the removal and recycling of elemental mercury and mercury containing products from a Covanta contract municipality hospital.

### **Progress to Date**

While we continue to have some success with our outreach efforts to the hospitals, progress has been slower in the dental community. We anticipate maintaining our efforts in the healthcare field while we continue to promote the recycling of mercury amalgam in the dental community during the year 2004, as time and budget allow.

## **H. Additional Education/Outreach Efforts**

Along with the programs and activities described earlier in this report, Covanta conducted and participated in other outreach and educational activities designed to instruct the public on the problems associated with improper management of mercury containing products. When these activities were conducted at regional events and the attendees were from a larger geographic area, where practical, these events were conducted jointly by Covanta and Ref-Fuel (SEMASS).

### **Activities Conducted**

- Sponsored educational booths at numerous environmental and business/Chambers of Commerce events including: The Massachusetts Municipal Association Annual Meeting and Trade Show in Boston MA; The Greater Merrimack Valley Chamber of Commerce Business to Business Expo, in North Andover, MA; The Haverhill Chamber of Commerce Business Expo in Haverhill, MA. Haverhill's Brightside Environmental Heroes Award Banquet
- As a member of the Northeast Recycling Council-Mercury in Vehicles Multi-Stakeholder Dialogue Committee, continue to review draft materials as they are developed with the hope that, ultimately, a document is produced and becomes



available that will aid automobile recyclers in the removal of mercury switches from end-of-life vehicles.

- Met and spoke frequently with WasteCap to plan and coordinate mailings, meetings, target sectors, potential partners, thermostat recovery program planning, revision of the scope and timeline etc.
- Spoke on mercury in the environment and other environmental issues in an address to the Youth Leadership Institute of the Lawrence Teen Coalition
- Assisted in the removal and provided replacements for the mercury thermostats at Adelante, an inner-city, low-income after school educational facility in Lawrence, MA.
- Attended meetings and follow-up discussions with Barry Connell and the Office of Technical Assistance to discuss a grant proposal being developed for school mercury clean-out projects in the Covanta contract municipalities that would require additional funding.
- In a continuing effort to educate the public on mercury issues, help in notifying the public about our program and to stay abreast of new developments in the solid/hazardous waste field, participated and attended numerous meetings and forums including:
  - MDEP – Annual Household Hazardous Product forum, Monthly Solid Waste Advisory Committee meetings, DEP “Money to Burn Conference”, Environmentally Preferable Products Vendor Fair, various grant and educational meetings etc.;
  - Environmental Seminars: “Dental Mercury Release Reduction Forum”, New Hampshire Department of Environmental Conservation Annual Meeting, etc.
  - Attended Solid Waste Trade Association and Recycling Association meetings including SWANA, the Environmental Business Council of New England, the Northeast Recycling Council, WasteCap Seminars, NorthShore Chamber of Commerce, MassRecycle, the NRRA Annual Conference and Trade Show
  - Attended various trainings including Mercury Product Collection Event Training, 8-hour Hazardous Waste Refresher Training
  - Massachusetts Recycling Incentive Program coordinators meetings;
  - Covanta Communities Recycling Coordinators meetings;

- Essex County and The Northeast/Central Massachusetts HHW quarterly Meetings and workshops.
- Haverhill Environmental League meeting
- Community Health Area Network-11 meetings
- Boards of Health meetings.

## **I. Conclusions**

Overall, the results of the first full year of program implementation under the Covanta MSP II remain quite good.

- The thermometer exchanges continue to be extremely popular and successful – both in terms of participation and removal of mercury from homes, as well as an educational tool. This program should be continued in all of our contract communities that wish to participate.
- While it is still too early in the program’s implementation to be able to quantify success, the mercury product collection days are very popular with the businesses that do utilize the program. The limited amount of time for outreach to the business community and the time necessary for smaller businesses to accumulate mercury bearing products before it is necessary/worthwhile to participate in a collection are both important factors that affect participation over the short time-frame that we have made the program available to the businesses.
- We continue to communicate to the commercial sector the importance of properly managing their mercury containing waste. Over time, we can be certain that with each year of outreach, PSA’s and advertisements for fluorescent bulb and thermostat collections and thermometer exchanges, more businesses are becoming aware of the importance of properly managing their mercury containing products. Although participation numbers and amounts diverted may be difficult to accurately calculate, the long term value of the educational component should not be overlooked.
- Through the various community outreach efforts that were undertaken – Chambers of Commerce events, cable T.V. and radio, public meetings, Business Expos and conferences, mailings, posters, brochures, etc. – the level of public education and awareness will continue to rise. It is hoped that this will lead to more participation in our program as well as local (HHP/HHW) programs.
- As noted earlier, the amount of mercury collected and documented in our program does not necessarily track all the mercury that was collected and recycled as a result of our efforts. Quantities of material collected and listed in this report only reflect what can be tracked through ONYX, municipal HHP/HHW collection days that we have received reports on and Universal Waste shed shipments of mercury and mercury containing products, as reported to us by the municipalities.

## **J. Materials Diverted/Reduced**

The amount of fluorescent bulbs recycled during 2003 and reported to Covanta was approximately 176,716 feet. Additionally, 372 pounds of elemental mercury and 817 pounds of Mercury Containing Articles (MCMA) were collected and recycled. This includes approximately 1908 thermometers that were collected and recycled. It does not include materials collected/aggregated but not yet shipped – materials located at/in a Universal Waste Shed or Board of Health office where collection activities are still on going, etc

## **K. Funds Expended**

### **1. Administrative Expenses**

● MSP program Coordinator	\$80,000
● Covanta – Haverhill	\$9,000
● Travel/Expenses	\$7,778

### **2. Outreach Efforts**

● IWSA	\$46,800
● WasteCap	\$15,297
● Newspaper/Radio & Conf.	\$20,030

### **3. Materials**

● Additional Mercury Spill Kits	\$438
● Printing-flyers/letters & mail list	\$683

### **4. Disposal/Recycle**

● Waste Shed Reimbursement	\$2,375
● Municipal/Comm. Reimbursement	\$8,890
● Mercury product recycling costs *	\$8098
● Collection event costs	\$4,500

TOTAL EXPENDITURES 2003	<div>=====</div> \$203,889
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### NOTES:

\* Does not include all material collected in 2003, only what had been shipped during 2003 and billed to date.